

ABSTRACT

The invention proposes a fine grained sintered cemented carbide containing chromium and based on WC and a binder based on Co or CoNiFe, and having at least one additional phase comprising at least one carbide or mixed carbide of tantalum. For
5 improving the high-temperature properties while simultaneously maintaining a good trade-off between hardness and bending strength, it is proposed that the sintered cemented carbide contains approximately 0.3 to 4 % Ta, as related to the total mass of the sintered cemented carbide, that the WC has a grain size of between 0.1 and 1.3 μm , that the binder phase contains the metals W, Cr and Ta, dissolved in solid solution, and
10 that the at least one additional phase comprises a TaC phase visible by optical microscopy. The invention further relates to a powder-metallurgical process for manufacturing the sintered cemented carbide and to the use of the sintered cemented carbide for manufacturing cutting tools having improved high-temperature properties.